

### The State of New Hampshire Department of Environmental Services



Michael P. Nolin Commissioner

### AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS

			Deviation						
	Actual	Normal	from	Percent					
	Rainfall	Rainfall	Normal	of					
	(inches)	(inches)	(inches)	Normal					
Coastal Drainage:	Rockingham, Straff	ord counties							
four month	17.77	14.02	3.75	127%					
six month	35.91	20.96	14.95	171%					
nine month	45.77	30.56	15.21	150%					
twelve month	62.43	40.62	21.81	154%					
Southern Interior: E	Belknap, Hillsboroug	gh, Merrimack coun	ties						
four month	16.04	13.93	2.10	115%					
six month	33.33	20.85	12.48	160%					
nine month	43.10	30.91	12.19	139%					
twelve month	56.75	41.08	15.67	138%					
South Western: Ch									
four month	15.17	13.58	1.59	112%					
six month	33.59	20.48	13.11	164%					
nine month	45.32	30.84	14.48	147%					
twelve month	57.25	41.18	16.07	139%					
White Mountain: Ca	arroll, Grafton count	iies							
four month	14.92	13.06	1.86	114%					
six month	29.28	29.28	9.26	100%					
nine month	42.08	30.80	11.28	137%					
twelve month	53.33	40.66	12.67	131%					
North Country O									
North Country: Coo	•	10 10	2.24	1070/					
four month	15.36	12.12	3.24	127%					
six month	31.04	19.00	12.04	163%					
nine month	46.37	31.12	15.25	149%					
twelve month	58.78	40.24	18.54	146%					

four month period : November 2005 - February 2006 six month period : September 2005 - February 2006 nine month period : June 2005 - February 2006 twelve month period: March 2005 - February 2006

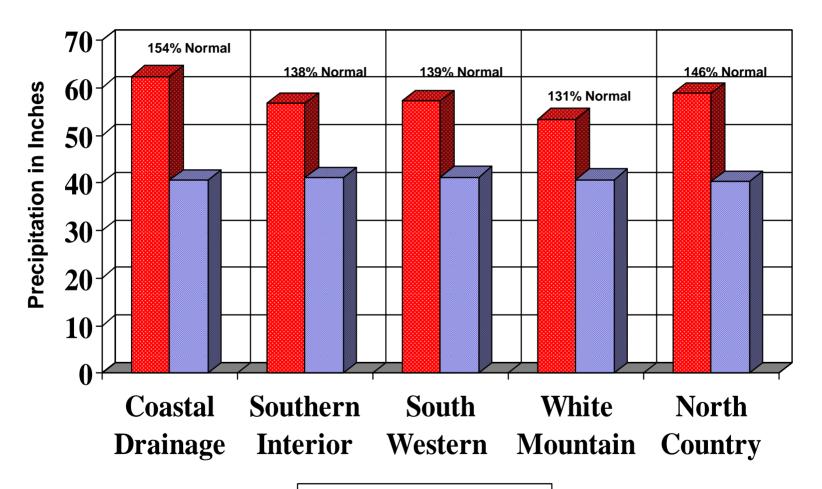
Source: Northeast River Forecast Center, NH Des Dam Bureau

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-7894 • TDD Access: Relay NH 1-800-735-2964

DES Web site: www.des.nh.gov

# TWELVE MONTH AGGREGATED PRECIPITATION DATA for N.H. DROUGHT MANAGEMENT AREAS from March 2005 through February 2006





#### **MONTHLY PRECIPITATION DATA FOR N.H COUNTIES**

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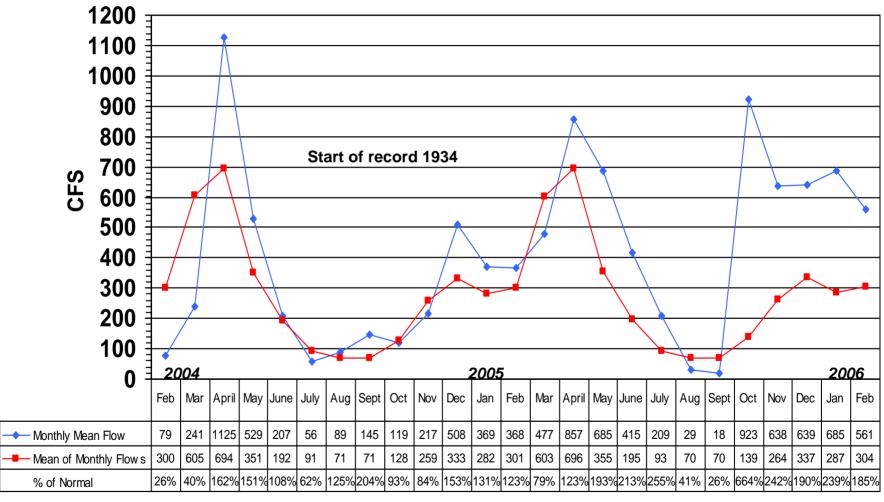
		2005										2006	
		MARCH	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB
Coastal drainage	3												
STRAFFORD	actual	4.72	5.45	7.21	4.24	3.24	1.98	2.92	15.92	4.94	5.80	5.67	2.93
OTTO ATTORE	normal	3.20	3.40	3.28	3.04	3.12	3.28	3.44	3.48	4.12	3.76	3.12	2.72
	deviation	1.52	2.05	3.93	1.20	0.12	-1.30	-0.52	12.44	0.82	2.04	2.55	0.21
ROCKINGHAM	actual	4.62	5.05	6.28	3.79	3.13	3.33	2.67	14.77	4.68	4.74	4.22	2.56
11001111101111111	normal	3.40	3.44	3.40	3.12	3.20	3.44	3.40	3.56	4.24	3.92	3.32	2.84
	deviation	1.22	1.61	2.88	0.67	-0.07	-0.11	-0.73	11.21	0.44	0.82	0.90	-0.28
Average	actual	4.67	5.25	6.75	4.02	3.19	2.66	2.80	15.35	4.81	5.27	4.95	2.75
7 tvorago	normal	3.30	3.42	3.34	3.08	3.16	3.36	3.42	3.52	4.18	3.84	3.22	2.78
	deviation	1.37	1.83	3.41	0.94	0.03	-0.71	-0.63	11.83	0.63	1.43	1.73	-0.04
Southern Interior		1.01	1.00	<u> </u>	0.01	0.00	0.,,	0.00	11.00	0.00	11.10	1	0.01
HILLSBOROUG		4.11	5.08	5.56	2.62	3.59	3.13	2.09	14.39	4.59	4.55	4.46	2.58
THEESBOROOG	normal	3.88	3.56	3.52	3.36	3.32	3.68	3.60	3.72	4.32	4.16	3.60	3.16
	deviation	0.23	1.52	2.04	-0.74	0.27	-0.55	-1.51	10.67	0.27	0.39	0.86	-0.58
MERRIMACK	actual	3.72	5.16	5.06	3.87	3.64	2.52	3.18	15.05	4.99	4.56	4.29	2.55
MERRIMACIR	normal	3.40	3.36	3.36	3.20	3.28	3.44	3.36	3.44	4.00	3.92	3.16	2.84
	deviation	0.32	1.80	1.70	0.67	0.36	-0.92	-0.18	11.61	0.99	0.64	1.13	-0.29
BELKNAP	actual	2.53	4.69	5.05	4.46	3.08	2.38	3.47	13.71	4.02	5.14	4.26	2.12
DELINIA	normal	2.92	3.24	3.28	3.16	3.44	3.28	3.36	3.28	3.80	3.48	2.92	2.44
	deviation	-0.39	1.45	1.77	1.30	-0.36	-0.90	0.11	10.43	0.22	1.66	1.34	-0.32
Average	actual	3.45	4.98	5.22	3.65	3.44	2.68	2.91	14.38	4.53	4.75	4.34	2.42
Average	normal	3.40	3.39	3.39	3.24	3.35	3.47	3.44	3.48	4.04	3.85	3.23	2.81
	deviation	0.05	1.59	1.84	0.41	0.09	-0.79	-0.53	10.90	0.49	0.90	3.23 1.11	-0.40
South Western	deviation	0.03	1.09	1.04	0.41	0.09	-0.73	-0.55	10.90	0.43	0.90	1.11	-0.40
CHESHIRE	actual	3.98	4.68	3.99	5.34	5.05	2.99	2.86	15.86	4.87	4.81	4.10	1.55
CHESHIKE	actual	3.48	3.40	3.44	3.44	3.28	3.68	3.52	3.36	3.84	3.76	3.28	2.80
	normal deviation	0.50	1.28	0.55	1.90	3.26 1.77	-0.69	-0.66	12.50	1.03	1.05	0.82	-1.25
SULLIVAN	actual	3.06	4.49	3.66	3.73	2.62	3.73	2.92	15.20	5.42	3.76	3.82	2.01
SULLIVAIN	normal	3.36	3.44	3.56	3.73	3.32	3.64	3.44	3.48	3.84	3.70	3.12	2.80
	deviation	-0.30	1.05	0.10	0.37	-0.70	0.09	-0.52	11.72	1.58	0.04	0.70	-0.79
Average	actual	3.52	4.59	3.83	4.54	3.84	3.36	2.89	15.53	5.15	4.29	3.96	1.78
Average	normal	3.42	3.42	3.50	3.40	3.30	3.66	3.48	3.42	3.84	3.74	3.20	2.80
	deviation	0.10	1.17	0.33	1.14	0.54	-0.30	-0.59	12.11	1.31	0.55	0.76	-1.02
Mhita Mauntain	GCVIATION	0.10		0.00	1.17	0.04	0.00	0.00	12.11	1.01	0.00	0.70	1.02
White Mountain GRAFTON	o otu o l	2.52	2.70	2.07	E 40	4.00	4.76	2.05	10.74	4.00	2.64	2.44	4.70
GRAFIUN	actual normal	2.53 3.04	3.78 3.24	3.97 3.56	5.42 3.48	4.00 3.84	4.76 3.64	3.85 3.48	10.74 3.48	4.99 3.76	3.61 3.64	3.44 2.92	1.70 2.60
			3.24 0.54		3.46 1.94		3.64 1.12		3.46 7.26		-0.03		-0.90
CARROLL	deviation	-0.51 2.13	4.83	0.41 5.26	4.09	0.16 3.74	3.59	0.37 3.20	10.92	1.23 4.74	-0.03 5.11	0.52	-0.90 2.19
CARROLL	actual	3.08			4.09 3.44		3.59 3.48	3.20 3.44	3.52		3.68	4.06	2.19
	normal		3.32	3.48		3.68				3.92		3.00	
A	deviation	-0.95	1.51	1.78	0.65 4.76	0.06	0.11 4.18	-0.24	7.40 10.83	0.82	1.43 4.36	1.06	-0.41 1.95
Average	actual	2.33	4.31	4.62		3.87		3.53		4.87		3.75	
	normal	3.06	3.28	3.52	3.46	3.76	3.56	3.46	3.50	3.84	3.66	2.96	2.60
N C	deviation	-0.73	1.03	1.10	1.30	0.11	0.62	0.07	7.33	1.03	0.70	0.79	-0.66
North Country			4.45	4.00		4.00		4.70	40.00		4.00	0.54	4.00
COOS	actual	3.14	4.45	4.82	5.59	4.99	4.75	4.78	10.90	5.96	4.00	3.54	1.86
	normal	2.76	3.04	3.32	4.16	3.96	4.00	3.40	3.48	3.48	3.44	2.72	2.48
	deviation	0.38	1.41	1.50	1.43	1.03	0.75	1.38	7.42	2.48	0.56	0.82	-0.62

Source: Northeast River Forecast Center, NH DES Dam Bureau

## LAMPREY RIVER near NEWMARKET NH Gage# 01073500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

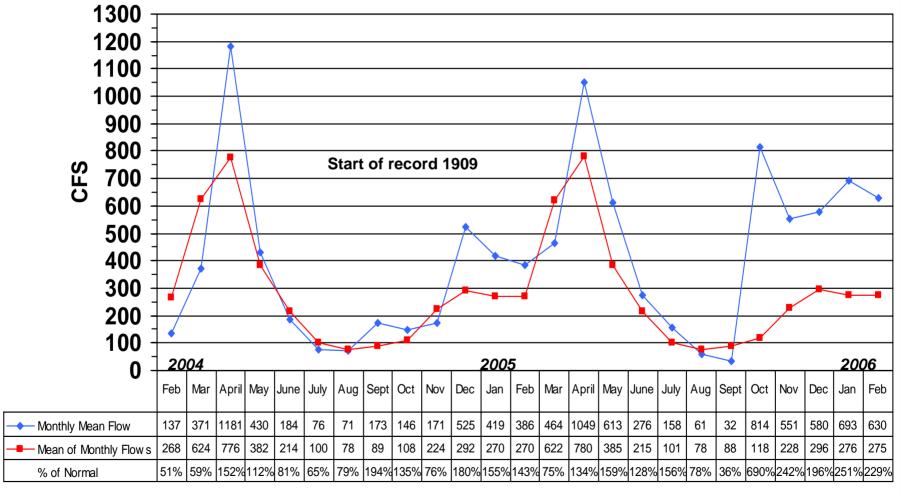


NH DES, Dam Bureau, Source: USGS (Ice: 01/03,12/04)

### SOUHEGAN RIVER at MERRIMACK NH Gage# 01094000



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

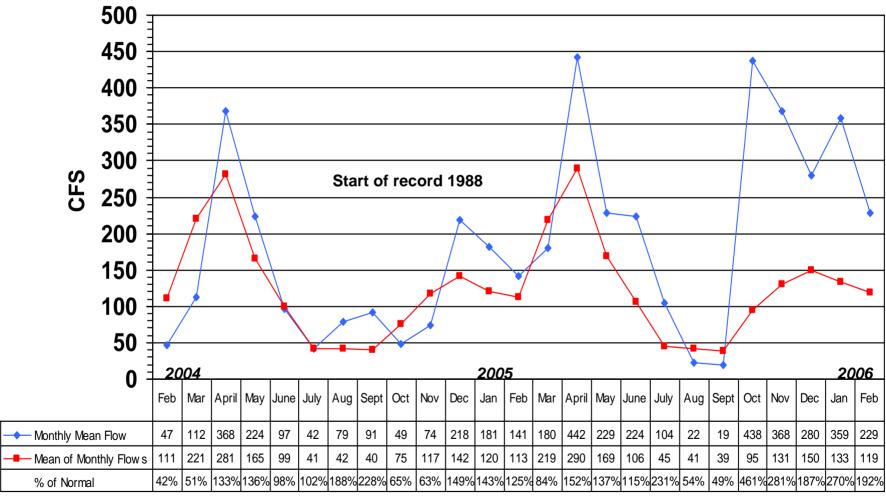


NH DES, Dam Bureau, Source: USGS (ice-01/03,02/03,03/03,01/04,02/04)

# SOUCOOK RIVER at PEMBROKE ROAD near CONCORD NH, Gage# 01089100



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

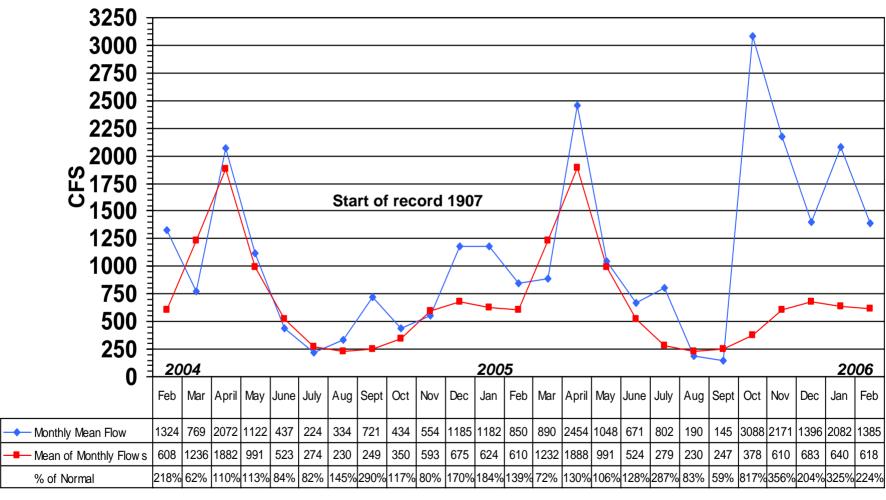


NH DES, Dam Bureau, Source: USGS (ice: 01/03, 02/03, 03/03, 01/04, 02/04, 03/04).

### ASHUELOT RIVER at HINSDALE NH Gage# 01161000



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

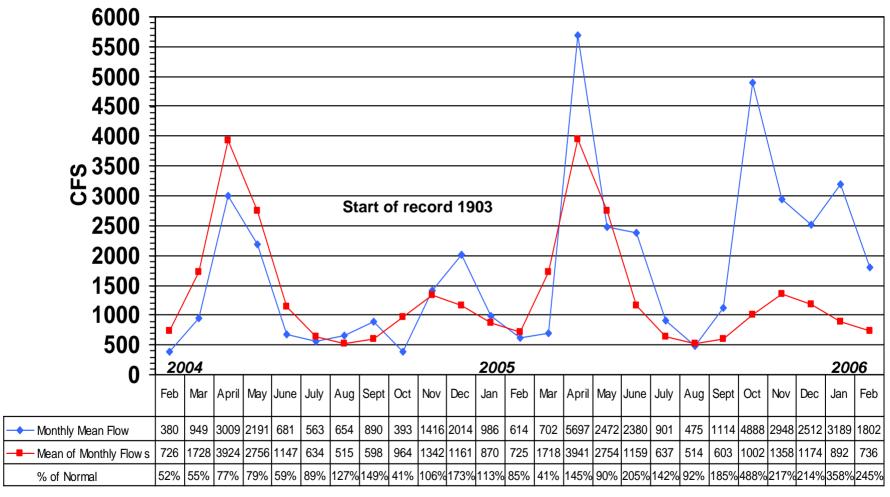


NH DES, Dam Bureau, Source: USGS (ice: 01/03,02/03,03/03,01/04,02/04,03/04)

### PEMIGEWASSET RIVER at PLYMOUTH NH Gage# 01076500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS



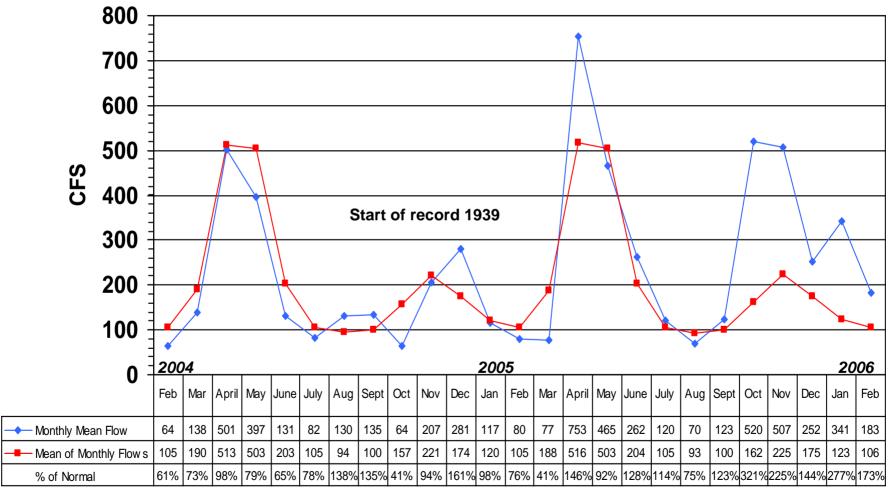
NH DES, Dam Bureau, Source: USGS (ice: 01/03,02/03,03/03,12/03,01/04,02/04,03/04,12/04)

### AMMONOOSUC RIVER at BETHLEHEM JUNCTION NH Gage# 01137500



MONTHLY MEAN FLOW COMPARED TO MEAN OF MONTHLY FLOWS

This station replaces gage# 01137000 which was discontinued by DES at the end of Sept 2004



NH DES, Dam Bureau, Source: USGS(ice:01/04,02/04,03/04,12/04)

#### STREAMFLOW DATA FOR SELECTED NH STATIONS AS OF MARCH 7, 2006



Station number	Station name	Est. Mean Flow (cfs)	Long Term Median Flow	99% Flow (cfs)	7Q10 Flow (cfs)	Lowest Period of Record Daily Flow (cfs)	% of Median	Below 0.99 Flow?	Below 7Q10 Flow?	Below Record Flow?
Androscoggin Rive										
	d River near Wentworth Location, NH	Ice	89	22	16	6.8	#REF!	#REF!	#REF!	#REF!
	oggin River at Errol, NH	3,800	1,810	500	451	0	#REF!	#REF!	#REF!	#REF!
01054000 Androsc	oggin River near Gorham, NH	4,310	2,150	1300	1310	795	#REF!	#REF!	#REF!	#REF!
Saco River Basin	ver near Convey NIII	laa	200	105	07	66	#DEE!	#DEE!	#DEE!	#DEE!
	ver near Conway, NH	lce	390	105	97	66	#REF!	#REF!	#REF!	#REF!
01064801 BEARCA	AMP RIVER AT SOUTH TAMWORTH, NH	Ice	148	6	4.8	4.5	#REF!	#REF!	#REF!	#REF!
Piscataqua River B	<u>asin</u> CO RIVER NEAR ROCHESTER, NH	72	159			2.2	#REF!			#REF!
		139		 7	5	Z.Z 		#REF!	#REF!	#KEF!
01073500 LAMPRE	EY RIVER NEAR NEWMARKET, NH	139	358	/	5		#REF!	#KEF!	#KEF!	
Merrimack River Ba	<u>asin</u> RANCH PEMIGEWASSET RIVER AT LINCOLN, NH	Ice	132	55	49	46	#VALUE!	#\/ALLIF!	#VALUE!	#\/ALLIF!
	WASSET RIVER AT WOODSTOCK, NH	224	160	65	56		140%	FALSE	FALSE	" VALUE.
	RIVER NEAR RUMNEY, NH	Ice	118	18	15				#VALUE!	
	WASSET RIVER AT PLYMOUTH, NH	Ice	600	130	118	45				#VALUE!
	RIVER NEAR BRISTOL, NH	Ice	87	7	6.2	2.7			#VALUE!	
	ESAUKEE RIVER AT TILTON, NH	842	837	143	136	48	101%	FALSE	FALSE	FALSE
	MACK RIVER AT FRANKLIN JUNCTION, NH	1,830	1,930	520*	551		95%		FALSE	
	OCOOK RIVER AT PETERBOROUGH, NH	71	105	5.5	6.3		68%	FALSE	FALSE	
	OCOOK RIVER NEAR HENNIKER, NH	361	538	40	37		67%	FALSE	FALSE	
	OCOOK R BL HOPKINTON DAM AT W HOPKINTON, NH	521	512	35	39		102%	FALSE	FALSE	
	R RIVER AT DAVISVILLE, NH	Ice	206	6	5.3		#VALUE!	#VALUE!	#VALUE!	
	VATER RIVER NEAR WEBSTER. NH	310	154	15.5	13.7		201%	FALSE	FALSE	
01090800 PISCAT	AQUOG RIVER BL EVERETT DAM, NR E WEARE, NH	59	98.5	1.7	1.2		60%	FALSE	FALSE	
	AQUOG RIVER NEAR GOFFSTOWN, NH	180	353	8	8.8		51%	FALSE	FALSE	
	MACK R NR GOFFS FALLS, BELOW MANCHESTER, NH	3,760	4,785	560*	644	98*	79%		FALSE	
	GAN RIVER AT MERRIMACK, NH	197	301	15	12.9		65%	FALSE	FALSE	
Connecticut River	<u>Basin</u>									
01129200 CONNE	CTICUT R BELOW INDIAN STREAM NR PITTSBURG, NH	332	625		42	30	53%	FALSE	FALSE	FALSE
	CTICUT RIVER AT NORTH STRATFORD, NH	Ice	1,150		176	108				#VALUE!
	CTICUT RIVER NEAR DALTON, NH	Ice	1,630		389	115			#VALUE!	
	IOOSUC RIVER AT BETHLEHEM JUNCTION, NH	Ice	71		28	21		#VALUE!		#VALUE!
	CTICUT RIVER AT WELLS RIVER, VT	2,590	3,990		690	152*	65%		FALSE	
	CTICUT RIVER AT WEST LEBANON, NH	6,960	4,885	380*	902	82*	142%		FALSE	
	RIVER AT WEST CLAREMONT, NH	251	296	40	38	14	85%	FALSE	FALSE	FALSE
	CTICUT RIVER AT NORTH WALPOLE, NH	5,230	7,470	260*	1058	115*	70%		FALSE	
	LOT RIVER BELOW SURRY MT DAM, NEAR KEENE, NH	81	147	4.5	2.7	0.4	55%	FALSE	FALSE	FALSE
	BROOK BELOW OTTER BROOK DAM, NEAR KEENE, NH	26	56.5	1.6	1.1	0.3	46%	FALSE	FALSE	FALSE
01160350 ASHUEL	LOT RIVER AT WEST SWANZEY, NH	222	669	32			33%	FALSE		

<sup>\*</sup>Flow duration and record low mean daily flow significantly affected by reservoir operations

Source: USGS, NH DES

SUMMARY	Below 0.99 Flow?	Below 7Q10 Flow?	Below Record Flow?
FALSE =	14	18	5
TRUE =	0	0	0

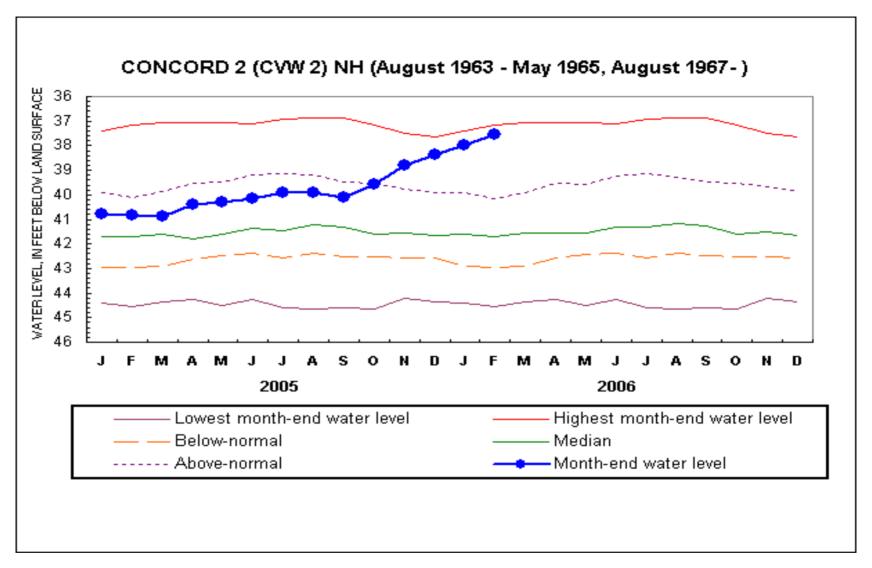
<sup>\*\*</sup>Estimated

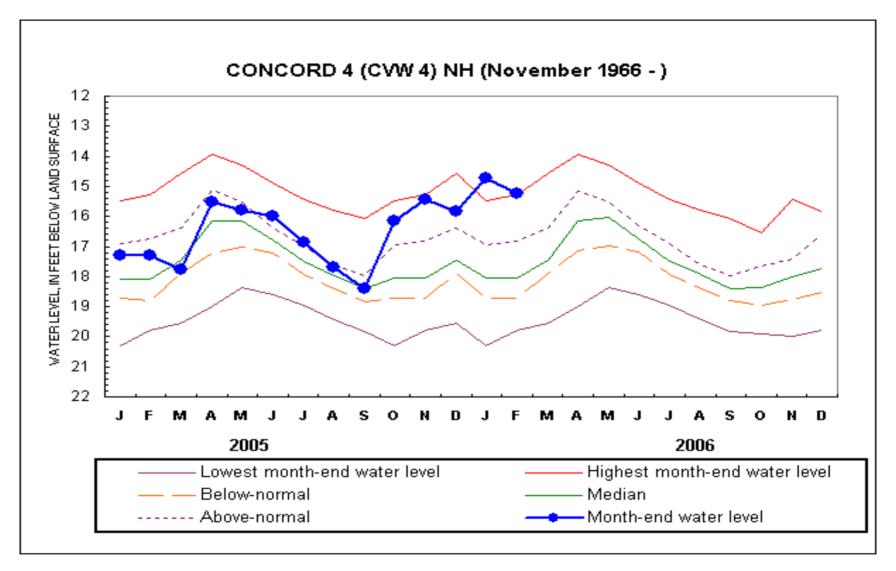
#### **New Hampshire Groundwater Levels for February 2006**

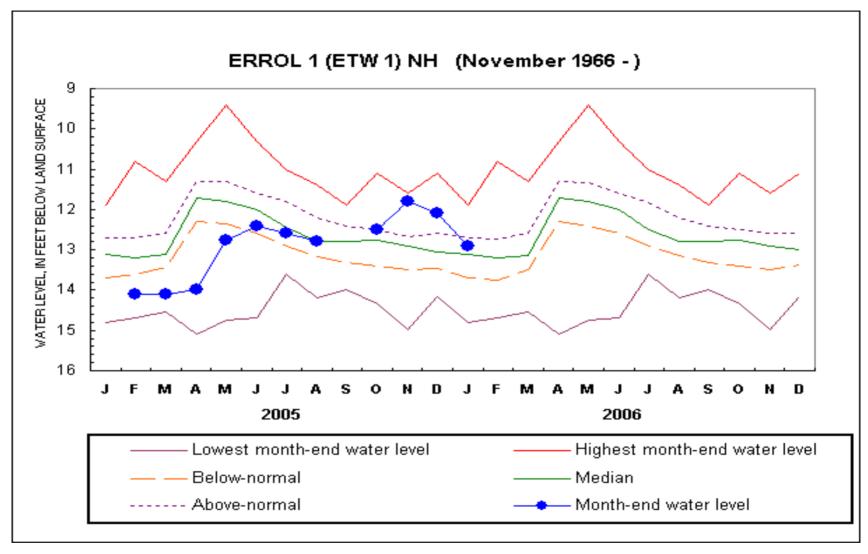


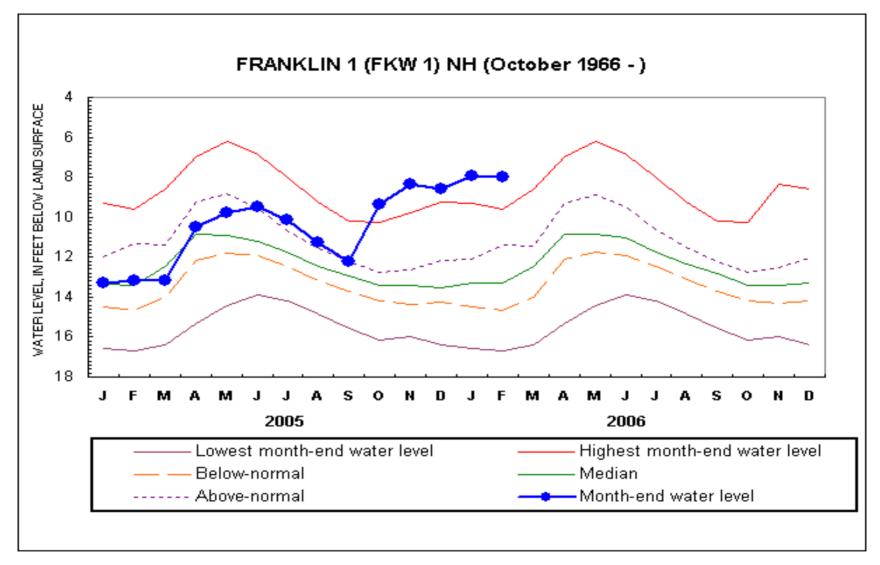
	START OF	WATER LEVEL BELOW	NET CHANGE	NET CHANGE			DEPARTURE FROM	PERCENT OF	
<u>WELL</u>	RECORD	SURFACE DATUM (ft)	IN ONE MONTH (ft)	IN ONE YEAR (ft)	<u>MEDIAN</u>	RANGE (ft)	MONTHLY MEDIAN (FT)	RANGE	<u>STATUS</u>
ALBANY 14	1995	5.71	-1.37	+1.16	6.97	2.12	+1.26	59.4	ABOVE NORMAL
ALBANY 15	1995	7.70	-1.82	+1.13	8.88	2.53	+1.18	46.6	ABOVE NORMAL
BARNSTEAD 10	1995	2.54	-0.18	+0.09	2.95	0.32	+0.41	128.1	ABOVE NORMAL
CAMPTON 34	1988	12.41	-1.39	+0.66	13.07	2.24	+0.66	29.5	ABOVE NORMAL
COLEBROOK 73	1995	7.60	-0.47	-0.02	7.34	0.71	-0.26	-36,6	ABOVE NORMAL
CONCORD 2	1963	37.54	+0.42	+3.31	41.68	4.54	+4.14	91.2	ABOVE NORMAL
CONCORD 4	1966	15.24	-0.50	+2.07	18.04	2.75	+2.80	101.8	ABOVE NORMAL
DEERFIELD 46	1984	37.43	+0.14	+1.21	38.65	0.77	+1.22	158.4	ABOVE NORMAL
ENFIELD 30	1990	2.57	-0.77	+5.10	7.23	3.90	+4.66	119.5	ABOVE NORMAL
ERROL 1	1966				13.2				
FRANKLIN 1	1966	7.99	-0.03	+5.20	13.30	3.68	+5.31	144.3	ABOVE NORMAL
GREENFIELD 75	1995	58.58	+0.64	+3.77	62.49	3.20	+3.91	122.2	ABOVE NORMAL
HOOKSETT 5	1965	46.29	+0.07	+1.74	47.97	6.25	+1.68	26.9	ABOVE NORMAL
KEENE 2	1963	3.00		+0.41	3.18	2.10	+0.18	8.6	NORMAL
LANCASTER 1	1966				1.50				<del></del>
LEE 1	1953	30.47	-0.42	+0.05	31.12	1.17	+0.65	55.6	ABOVE NORMAL
LISBON 19	1990	12.39	-0.40	+0.43	13.02	1.63	+0.63	38.7	NORMAL
NASHUA 218	1964	26.38	-0.07	+0.51	28.22	1.33	+1.84	138.3	ABOVE NORMAL
NEW DURHAM 53	1986	18.68	-0.27	+0.26	19.17	1.02	+0.49	48.0	NORMAL
NEW LONDON 1	1947	6.93	-2.69	+1.57	9.30	5.63	+2.37	42.1	ABOVE NORMAL
NEWPORT 3	1995	4.95	-1.27	+0.85	5.89	1.74	+0.94	54.0	ABOVE NORMAL
NEWPORT 6	1995	5.03	-1.29	+0.82	5.97	1.92	+0.94	49.0	ABOVE NORMAL
OSSIPEE 38	1995	33.53	+0.10	+2.46	36.01	1.14	+2.48	217.5	ABOVE NORMAL
SHELBURNE 2	1995	4.78	-0.35	+0.27	4.70	0.35	-0.08	-22.9	NORMAL
WARNER 1	1965	27.63	+0.17	+2.99	30.81	1.71	+3.61	211.1	ABOVE NORMAL

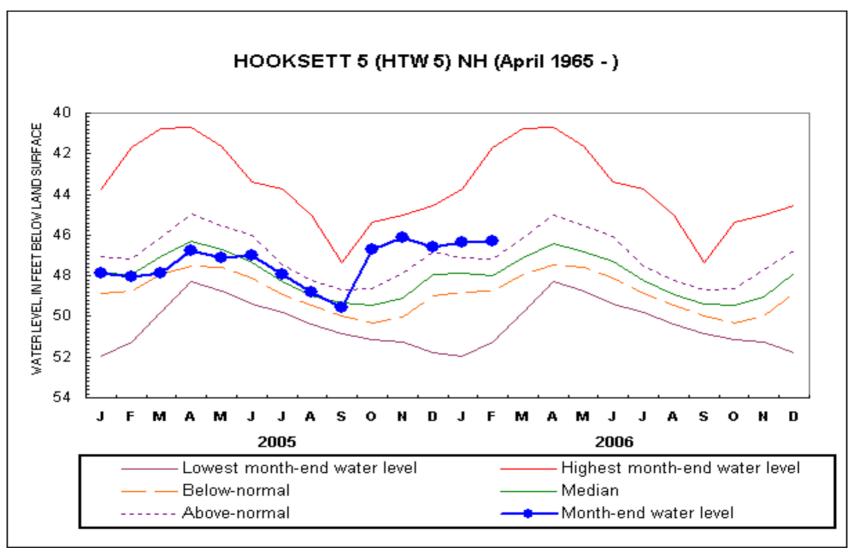
Source: USGS, NH DES

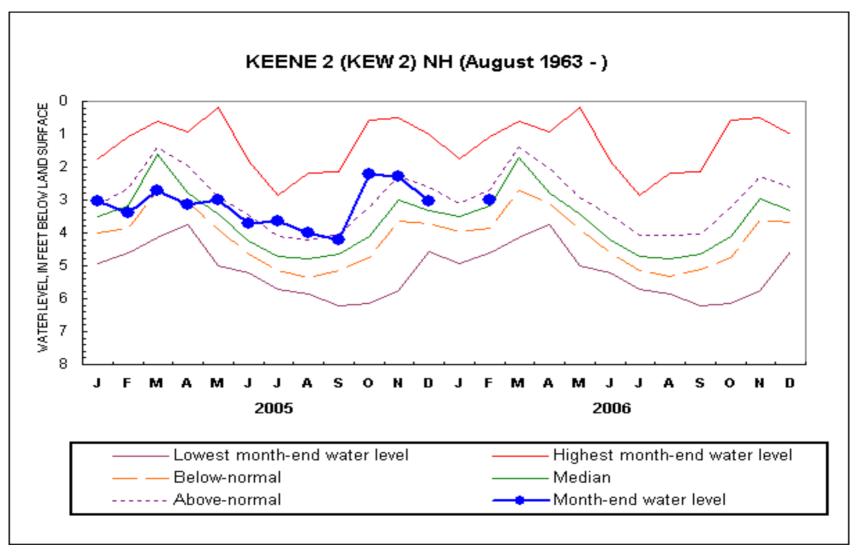


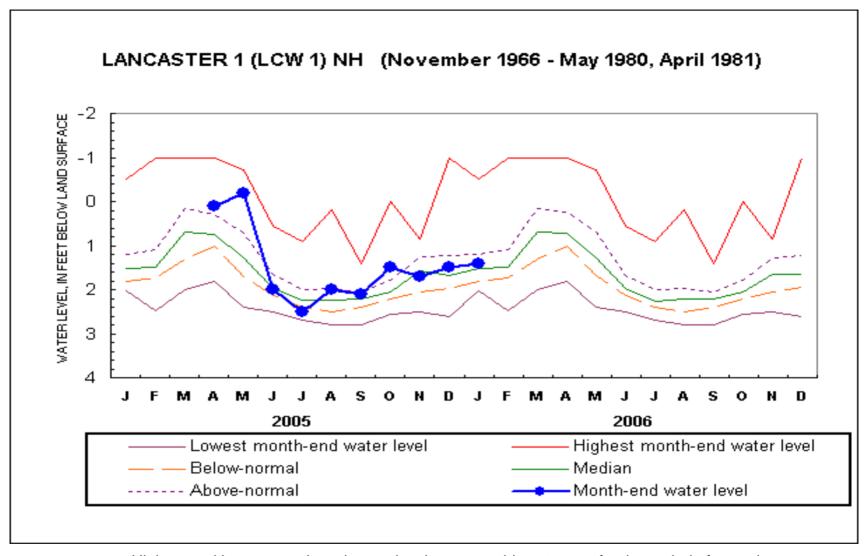


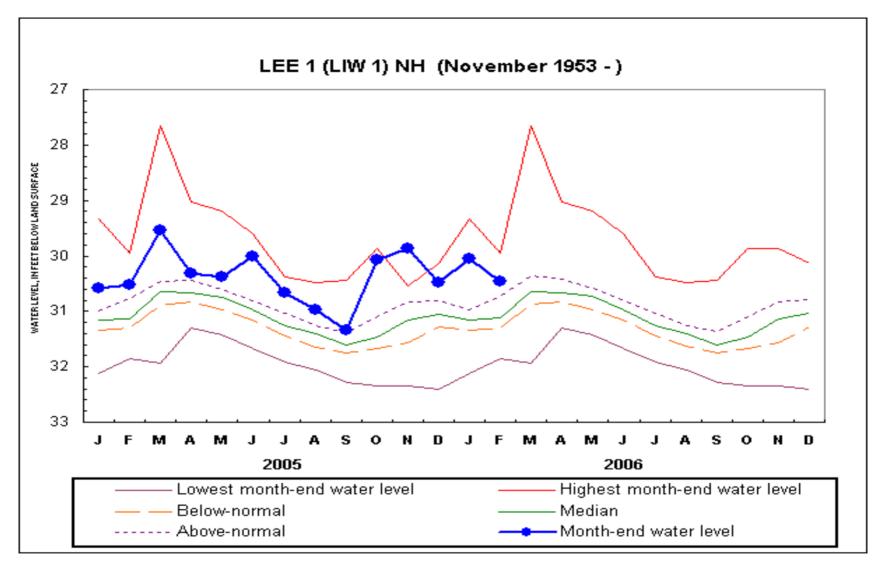


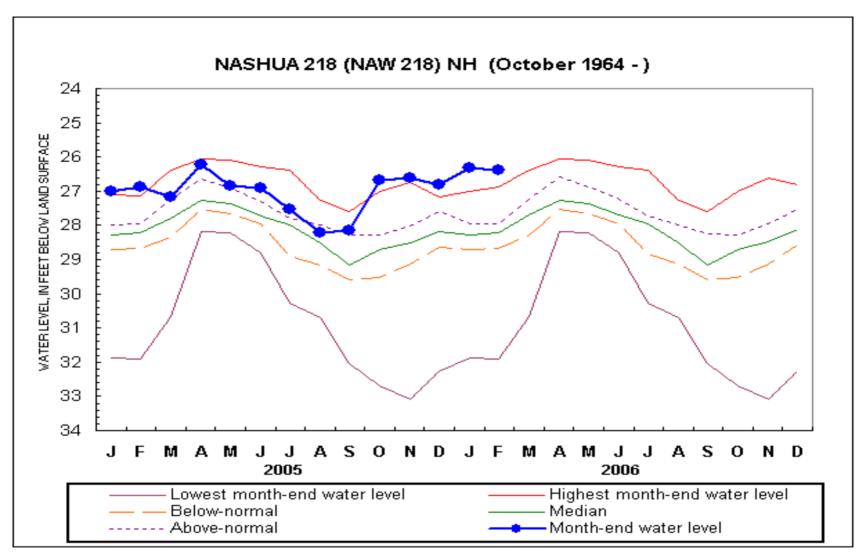


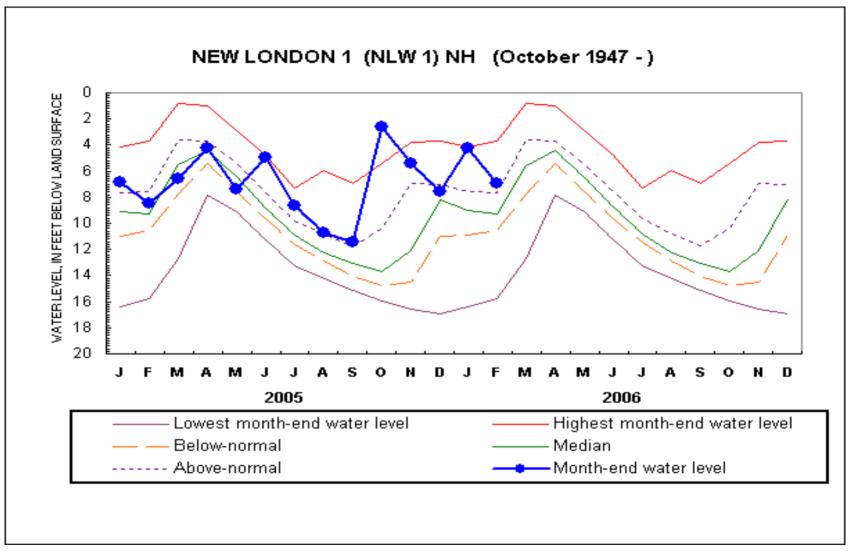


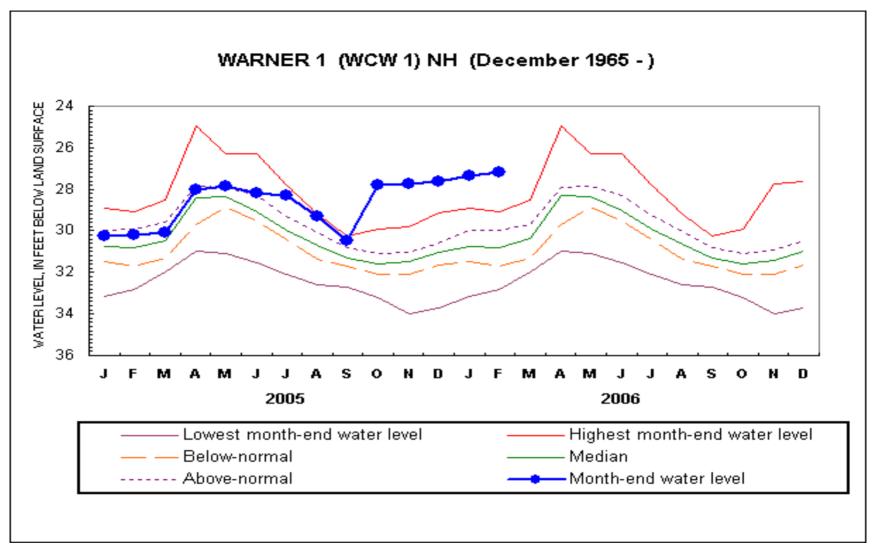






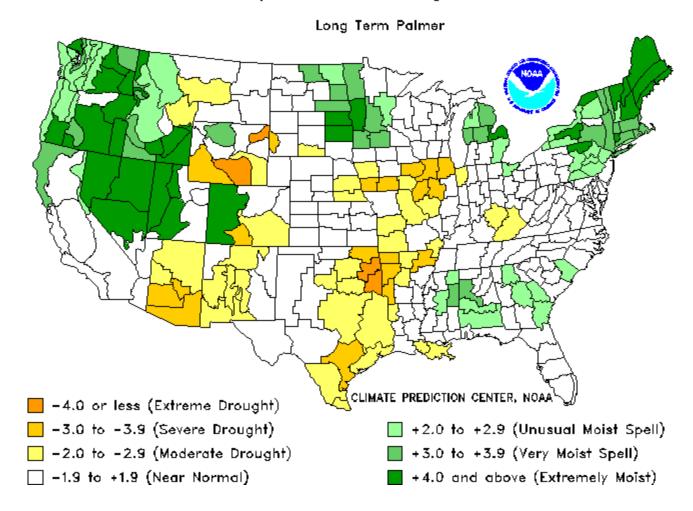






#### Drought Severity Index by Division

Weekly Value for Period Ending 4 MAR 2006

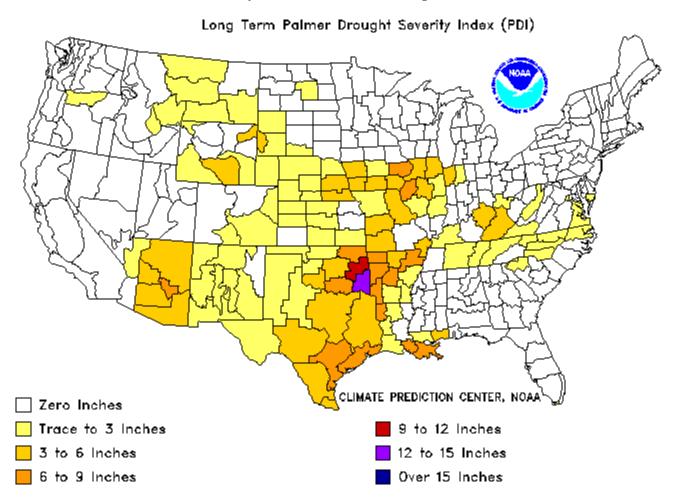


#### THE PALMER DROUGHT SEVERITY INDEX

The Palmer Index uses temperature and rainfall information in a formula to determine dryness. The advantage of the Palmer Index is that it is standardized to local climate.

Additional Precip. Needed (In.) to Bring PDI to -0.5

Weekly Value for Period Ending 4 MAR 2006



This is the amount of rainfall required in a week's time to bring the index back to zero inches required.